CITY OF BURLINGTON, VERMONT

CLIFF STREET SIDEWALK IMPROVEMENTS

STP SDWK(6)

OCTOBER, 2014

DRAFT

OCTOBER 07, 2014

Aldrich + Elliott
WATER RESOURCE ENGINEERS
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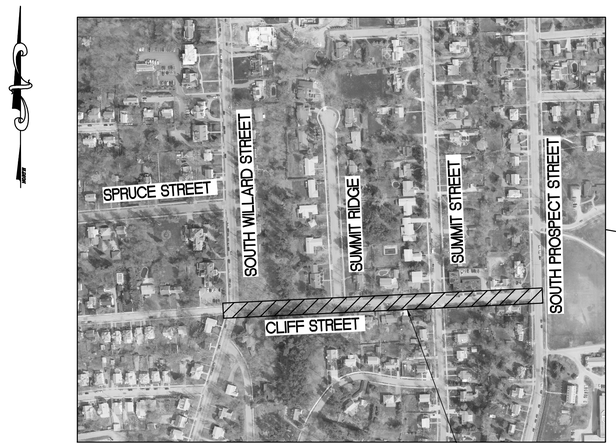
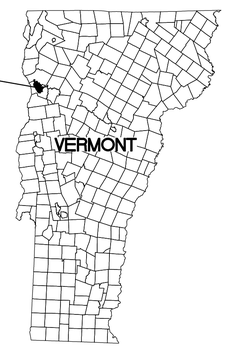


LOCATION MAP
SCALE: 1"=300'



INDEX OF DRAWINGS

DRAWING NO.	TITLE
T	TITLE SHEET AND INDEX OF DRAWINGS
1	GENERAL CONSTRUCTION LEGEND AND NOTES
2	QUANTITY SHEET
3	TYPICAL STREET/SIDEWALK CROSS SECTIONS
4	PLAN AND PROFILE STATION 0+00 TO 4+22
4A	PLAN AND PROFILE STATION 0+00 TO 2+00
4B	PLAN AND PROFILE STATION 2+00 TO 4+22
5	PLAN AND PROFILE STATION 4+22 TO 8+18
6	PLAN AND PROFILE STATION 8+18 TO 12+01
7	SIDEWALK CROSS SECTIONS
8	STORMWATER AND ROADWAY DETAILS
9	EROSION CONTROL DETAILS AND NOTES

PROJECT DESCRIPTION AND LOCATION

THE PROJECT SHALL CONSIST OF THE INSTALLATION OF APPROXIMATELY 640 LINEAR FEET OF NEW 5 FOOT WIDE CONCRETE SIDEWALK INCLUDING CURBING AND DRAINAGE. THE PROJECT IS LOCATED ON THE NORTH SIDE OF CLIFF STREET, BEGINNING AT SOUTH WILLARD STREET AND EXTENDING TO SOUTH PROSPECT STREET.

VERMONT AGENCY OF TRANSPORTATION QUALITY ASSURANCE PROGRAM=LEVEL 3

VTRANS STANDARDS		
STANDARD	DESCRIPTION	DATE
B-71	STANDARDS FOR RESIDENTIAL AND COMMERCIAL DRIVES	7/8/05
C-2A	PORTLAND CEMENT SIDEWALK DRIVE ENTRANCES WITH SIDEWALK ADJACENT TO CURB	10/14/05
C-2B	PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCE WITH SIDEWALK AND GREEN STRIP	3/10/08
C-3A	SIDEWALK RAMPS	3/10/08
C-3B	SIDEWALK RAMPS AND MEDIAN STRIPS	3/10/08
C-10	CURBING	2/11/08
D-11	CAST IRON COVER	2/11/08
E-193	PAVEMENT MARKING DETAILS	2/11/08
J-3	MAILBOX SUPPORT DETAIL	8/07/95

CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE PLANS AND THE STATE OF VERMONT, AGENCY OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2011 OR LATEST EDITION.

No.	DATE	DESCRIPTION	CHECKED

CITY OF BURLINGTON, VERMONT

CLIFF STREET SIDEWALK IMPROVEMENTS

TITLE SHEET AND INDEX OF DRAWINGS

DESIGNED JJD	PROJECT NO. 12077
DRAWN JEB	DRAWING NO. T
CHECKED JJD	
DATE OCT. 2014	

LEGEND

EXISTING

PLAN

PROPERTY LINE . . . . . PL PL
RIGHT-OF-WAY . . . . . ROW ROW
CONTOUR 360
WATERLINE . . . . . W
TELEPHONE CONDUIT (UNDERGROUND) . . . . . UGT
ELECTRICAL CONDUIT (UNDERGROUND) . . . . . UGE
OVERHEAD POWER . . . . . OHP
SANITARY SEWER . . . . . S
DRAIN . . . . . D
UNDERGROUND GAS. . . . . GAS
CULVERT . . . . .
TREE/BRUSH LINE . . . . .
GRAVEL ROAD OR DRIVE . . . . .
BITUMINOUS PAVEMENT . . . . .
SIDEWALK-CONCRETE . . . . .
CONCRETE CURB . . . . .
DITCH LINE . . . . .

TELEPHONE POLE. . . . . .
POWER POLE. . . . . .
COMBINATION POLE. . . . . .

GUY WIRE . . . . .
SEWER MANHOLE. . . . . S
CATCH BASIN. . . . . ⊞
HYDRANT. . . . . .
CURB STOP. . . . . ⊕
VALVE. . . . . ⋈
SIGN. . . . . .
DECIDUOUS TREE. . . . . .
CONIFEROUS TREE. . . . . .
STUMP. . . . . .
SURVEY POINT SET. . . . . △ STA. 1
PAVEMENT CORE 1
PROPERTY PIN . . . . . ○
LEDGE . . . . . .
LIGHT POLE . . . . . ☼
R.O.W. MONUMENT . . . . . ▫
ELECTRICAL PULLBOX . . . . . E
MAILBOX . . . . . MB

PROFILE

GROUND SURFACE . . . . . .

PROPOSED

PLAN

CONTOUR 360
STORMDRAIN . . . . . SD
SILT FENCE . . . . .
PERMANENT EASEMENT LIMIT. . . . . .
TEMPORARY EASEMENT LIMIT. . . . . .
CONCRETE CURB . . . . .
BITUMINOUS PAVEMENT . . . . .
SIDEWALK-CONCRETE . . . . .
CATCH BASIN . . . . . ⊞
SWALE . . . . .

PROFILE

SIDEWALK-CONCRETE . . . . .

GENERAL CONSTRUCTION NOTES

1. **SAFETY**

   A. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF EMPLOYEES ON THE PROJECT AND SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF FEDERAL, STATE AND LOCAL SAFETY LAWS AND BUILDING CODES TO PREVENT ACCIDENTS OR INJURY. THE CONTRACTOR SHALL ERECT AND PROPERLY MAINTAIN AT ALL TIMES ALL NECESSARY SAFEGUARDS AND BARRICADES FOR THE PROTECTION OF EMPLOYEES ON THE WORK AND SAFETY OF OTHERS EMPLOYED NEAR THE WORK AND THE PUBLIC. FURTHER, THE CONTRACTOR SHALL POST DANGER SIGNS AND OTHER WARNING DEVICES TO PROTECT INDIVIDUALS FROM BEING INJURED IN THE VICINITY OF THE WORK.

   B. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE O.S.H.A. SAFETY REQUIREMENTS. THE CONTRACTOR SHALL INSURE ALL WORK PROCEEDS IN ACCORDANCE WITH O.S.H.A. REQUIREMENTS FOR SAFETY TRENCHING, EXCAVATION, AND CONFINED SPACE ENTRY PROCEDURES.

   C. THE CONTRACTOR SHALL PROVIDE ADEQUATE EQUIPMENT AND FACILITIES AS ARE NECESSARY AND REQUIRED TO PROVIDE EMERGENCY FIRST AID TO ANY PERSON WHO MAY BE INJURED IN THE PROSECUTION OF THE WORK UNDER THIS CONTRACT.

2. **PROTECTION OF WORK**

   A. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE PROTECTION OF ALL BUILDINGS, STRUCTURES AND UTILITIES (BOTH PUBLIC AND PRIVATE), INCLUDING POWER POLES, SIGNS, UTILITY SERVICES, WATER MAINS, HYDRANTS, SEWERS, FORCE MAINS, STORM DRAINS, BURIED ELECTRICAL OR CONTROL WIRES, AND TELEPHONE CABLES WHETHER OR NOT THEY ARE SHOWN ON THE CONTRACT DRAWINGS.

   B. THE CONTRACTOR SHALL CAREFULLY SUPPORT AND PROTECT ANY UTILITIES, STRUCTURES, PIPE LINES, AND CONDUITS WHICH MAY BE ENCOUNTERED DURING COMPLETION OF THE WORK. ANY DAMAGE RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED BY HIM TO THE SATISFACTION OF THE ENGINEER AT CONTRACTORS EXPENSE.

3. **BURIED UTILITIES**

   A. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" AT 1-888-DIG-SAFE 2 WEEKS PRIOR TO EXCAVATING IN CONSTRUCTION AREAS IN ORDER TO LOCATE BURIED UTILITIES WHICH MAY OR MAY NOT BE PRESENT. NO EXCAVATION IS AUTHORIZED UNTIL AFTER DIG SAFE HAS MARKED ALL EXISTING UTILITIES.

   B. UNDERGROUND UTILITIES LOCATIONS ARE APPROXIMATE ONLY. THOSE SHOWN ON THE DRAWINGS ARE BASED ON THE BEST AVAILABLE INFORMATION. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY OWNERS OF ADJACENT UTILITIES WHEN PROSECUTION OF THE WORK MAY AFFECT THEM. ALL DAMAGE, INJURY OR LOSS TO ANY PROPERTY, BY THE CONTRACTOR, OR ANY SUB-CONTRACTOR, TO THE FAULT OR NEGLIGENCE OF THE CONTRACTOR, SHALL BE REPLACED OR RESTORED TO AT LEAST ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR'S DUTIES AND RESPONSIBILILITIES FOR THE SAFETY AND PROTECTION OF THE WORK SHALL CONTINUE UNTIL SUCH TIME AS ALL THE WORK IS COMPLETED AND THE ENGINEER HAS ISSUED A NOTICE TO THE OWNER AND THE CONTRACTOR AS DESCRIBED HEREIN THAT WORK IS ACCEPTABLE AND FOR A PERIOD OF TWELVE MONTHS THEREAFTER.

3. **BURIED UTILITIES (CONT.)**

   C. THE CONTRACTOR SHALL EXCAVATE TEST PITS AS REQUIRED TO LOCATE EXISTING UTILITIES. THESE SHALL BE EXCAVATED TO LOCATE BURIED UTILITIES AND TO DETERMINE EXACT LOCATIONS AND/OR MATERIALS OF EXISTING UTILITIES. SOME HAND EXCAVATION MAY BE NECESSARY TO PROTECT UTILITIES. TEST PITS SHALL BE EXCAVATED AT LEAST TWO (2) WEEKS PRIOR TO CONSTRUCTION OF A PARTICULAR ITEM OF WORK SO THAT ALL TEST PITS REQUIRED OR NECESSARY BY THE CONTRACTOR SHALL BE INCLUDED IN PAY ITEM 204.22.

   D. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR REPAIR OF ANY SUCH DAMAGE AS QUICKLY AS POSSIBLE AT HIS OWN EXPENSE. THE CONTRACTOR SHALL MAINTAIN A SUPPLY OF REPAIR MATERIALS AND PIPE ON THE JOB SITE AT ALL TIMES IN ORDER TO MINIMIZE THE INCONVENIENCE CAUSED BY SUCH DAMAGE.

   E. ALL PROJECT WORK SHALL BE WITHIN THE CITY RIGHT-OF-WAY. FOR ANY DISTURBANCE OUTSIDE THE CITY RIGHT-OF-WAY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIRING A PRIVATE LOCATION SERVICE, SUCH AS VERMONT UNDERGROUND LOCATIONS, TO IDENTIFY ANY UTILITIES WHICH MAY BE ENCOUNTERED ON PRIVATE PROPERTY.

4. **CONSTRUCTION**

   A. THE CONTRACTOR SHALL USE ONLY DESIGNATED BENCH MARKS FOR REFERENCE ELEVATIONS.

   B. EROSION CONTROL SHALL BE PROVIDED BY THE CONTRACTOR, IN ACCORDANCE WITH CONTRACT DOCUMENTS AND THE VERMONT LOW RISK HANDBOOK. EROSION CONTROLS SHALL BE IN PLACE PRIOR TO CONSTRUCTION. NO AREA SHALL BE LEFT UNSTABILIZED FOR MORE THAN SEVEN DAYS AT A TIME.

   C. ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES MUST BE IMPLEMENTED PRIOR TO CONSTRUCTION.

5. **SITEWORK**

   A. ALL EXCESS MATERIAL SHALL BE DISPOSED OF OFF SITE UNLESS APPROVED BY THE OWNER. A COPY OF A WRITTEN AGREEMENT BETWEEN THE CONTRACTOR AND THE SITE OWNER SHALL BE SUBMITTED TO THE ENGINEER BEFORE ANY MATERIAL IS DEPOSITED AT THE SITE. DISPOSAL OF EXCESS MATERIALS OFF-SITE SHALL BE PERFORMED IN ACCORDANCE WITH SOLID WASTE MANAGEMENT DIVISION REGULATIONS AND SHALL INCLUDE THE OBTAINING OF ANY REQUIRED PERMITS. VTRANS WILL NEED TO REVIEW AND APPROVE OF ALL WASTE, BORROW AND STAGING SITES OF THE CONTRACTOR BEFORE THEY CAN BE USED AND BEFORE CONSTRUCTION CAN BEGIN.

6. **TRAFFIC CONTROL**

   A. THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AS NECESSARY TO MAINTAIN TRAFFIC FLOW, BOTH VEHICULAR AND PEDESTRIAN, ON ALL ROADS EFFECTED BY WORK DONE UNDER THIS CONTRACT, AND TO MAINTAIN ACCESS TO ALL PROPERTIES ADJACENT TO THE WORK. THIS WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, THE USE OF FLAGGERS AND UNIFORMED TRAFFIC CONTROL, FURNISHING, ERECTING, MOVING, AND DISMANTLING BARRICADES, SIGNS, AND TEMPORARY LIGHTING TO INFORM THE GENERAL PUBLIC OF HAZARDS EXISTING AT THE SITE OF THE WORK.

   B. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION (LATEST EDITION) AND THE MANUAL ON UNIFORMED TRAFFIC CONTROL DEVICES.

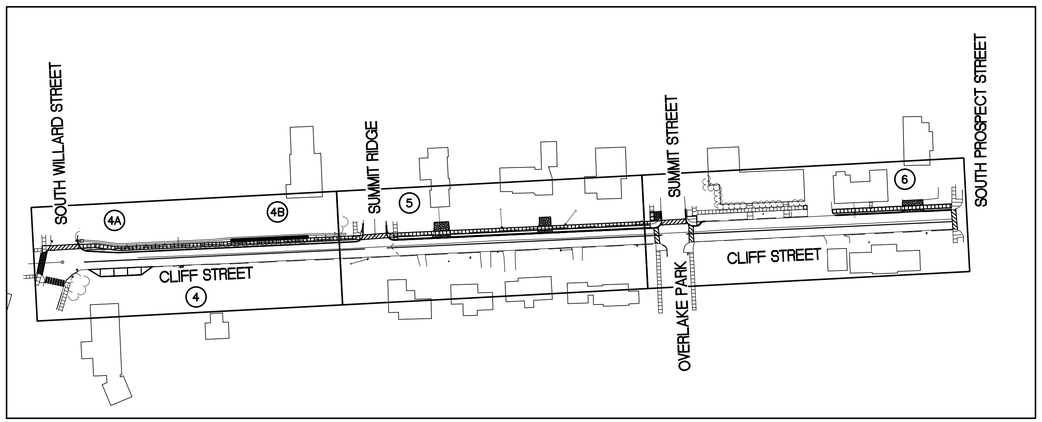
   C. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN AND SIGN PACKAGE FOR REVIEW AND APPROVAL BY THE OWNER AND ENGINEER. THE CONTRACTOR SHALL NOT COMMENCE WORK UNTIL THE TRAFFIC CONTROL PLAN AND SIGN PACKAGE HAVE BEEN APPROVED.

7. **RECORD DOCUMENTS**

   A. ALL BURIED UTILITIES ENCOUNTERED SHALL BE DOCUMENTED WITH DEPTH AND THREE (3) TIES AND SHOWN BY THE CONTRACTOR ON RECORD DRAWINGS.

8. **STANDARDS**

   A. USE STATE OF VERMONT, AGENCY OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2011, OR LATEST EDITION.



N
LOCATION PLAN
SCALE: 1"=100'

DRAFT
10/07/14

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No.	DATE	DESCRIPTION	CHECKED

CITY OF BURLINGTON, VERMONT

CLIFF STREET SIDEWALK IMPROVEMENTS

GENERAL CONSTRUCTION LEGEND AND NOTES

DESIGNED JJD	PROJECT NO. 12077
DRAWN JEB	DRAWING NO. 1
CHECKED JJD	
DATE OCT. 2014	

QUANTITY SHEET

ESTIMATED QUANTITIES	UNIT	DESCRIPTION OF ITEM	ITEM NO.
1	LS	Clearing and Grubbing	201.10
430	CY	Common Excavation	203.15
50	CY	Solid Rock Excavation	203.16
60	CY	Excavation of Surfaces and Pavements	203.28
150	CY	Trench Excavation of Earth, Exploratory	204.22
40	CY	Structure Excavation	204.25
30	CY	Granular Backfill for Structures	204.30
240	CY	Subbase of Crushed Gravel, Fine Graded	301.26
10	CWT	Emulsified Asphalt	404.65
80	TON	Bituminous Concrete Pavement	406.25
15	GAL	Water Repellent, Silane	514.10
15	LF	24" CPEP(SL)	601.2620
1	EA	Precast Reinforced Concrete Catch Basin with Cast Iron Grate	604.20
30	HR	Power Broom Rental, Type I	608.30
30	MGAL	Dust Control with Water	609.10
1020	LF	Cast-in-Place Concrete Curb, Type B	616.28
1	EA	Relocate Mail Box, Single Support	617.10
600	SY	Portland Cement Concrete Sidewalk, 5 Inch	618.10
40	SY	Portland Cement Concrete Sidewalk, 8 Inch	618.11
120	SY	Detectable Warning Surface	618.30
1.5	TON	Crushed Stone Bedding(3/4")	629.54
540	HR	Flaggers	630.15
1	LS	Mobilization / Demobilization	635.11
1	LS	Traffic Control	641.10
2180	LF	Durable (4 inch) Yellow Line - Thermoplastic	646.412
170	LF	Durable Crosswalk Marking - Thermoplastic	646.502
500	SY	Geotextile for Silt Fence	649.51
10	LB	Seed	651.15
42	LB	Fertilizer	651.18
0.30	TON	Agricultural Limestone	651.20
0.25	TON	Hay Mulch	651.25
120	CY	Topsoil	651.35
410	SY	Temporary Erosion Matting	653.20
2	CY	Temporary Stone Check Dam, Type I	653.25
5	EA	Inlet Protection Device, Type I	653.40
680	LF	Barrier Fence	653.50
1	LS	Tree Protection	656.85
5	EA	Removing Signs	675.50
5	EA	Erecting Salvaged Signs	675.60
5	EA	Setting Salvaged Posts	675.61

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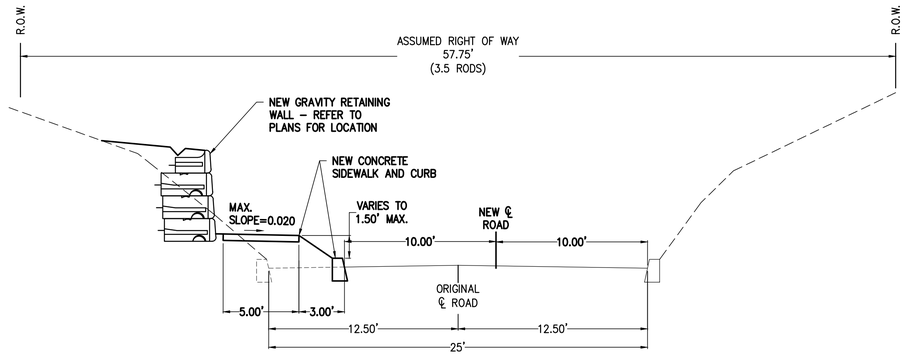
CITY OF BURLINGTON, VERMONT

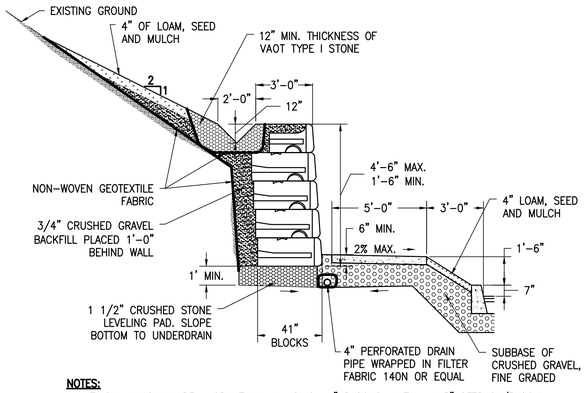
CLIFF STREET SIDEWALK IMPROVEMENTS

QUANTITY SHEET

DESIGNED	PROJECT NO.
JJD	12077
DRAWN: JEB	DRAWING NO.
CHECKED: JJD	2
DATE: OCT. 2014	



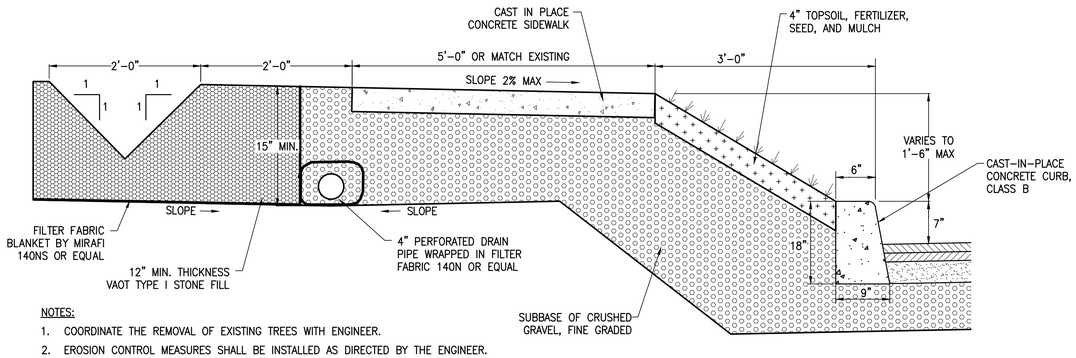
A 3 SOUTH WILLARD STREET TO SUMMIT RIDGE
SCALE: 1"=5'



NOTES:

1. THIS WALL SHALL BE A GRAVITY WALL USING 41" BLOCKS WITH A 1.5" SETBACK/BLOCK.
2. THE WALL BATTER AT LAST COMPLETE BLOCK WILL BE 47" AT MAXIMUM WALL HEIGHT AS MEASURED FROM THE FACE OF THE LOWEST BLOCK TO THE REAR OF THE LAST COMPLETE BLOCK.
3. COORDINATE THE REMOVAL OF EXISTING TREES WITH ENGINEER.
4. EROSION CONTROL MEASURES SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER.

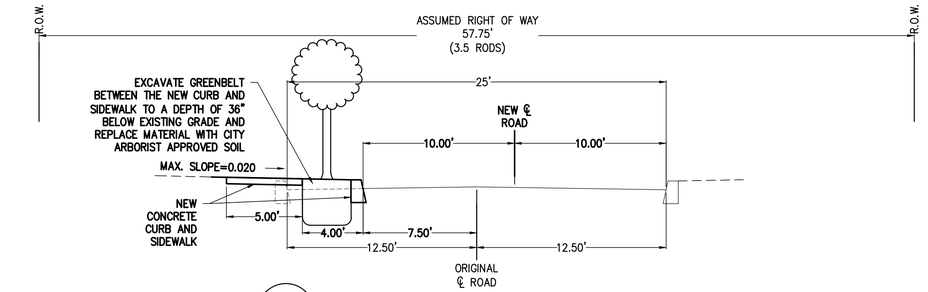
B 3 TYPICAL RETAINING WALL SECTION – SOUTH WILLARD STREET TO SUMMIT RIDGE
SCALE: 1/4"=1'–0"



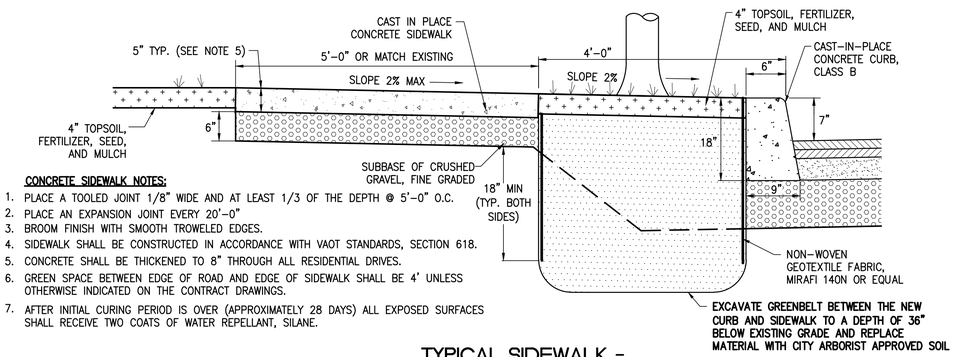
NOTES:

1. COORDINATE THE REMOVAL OF EXISTING TREES WITH ENGINEER.
2. EROSION CONTROL MEASURES SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER.

C 3 TYPICAL SIDEWALK SECTION SOUTH WILLARD STREET TO SUMMIT RIDGE
SCALE: NONE



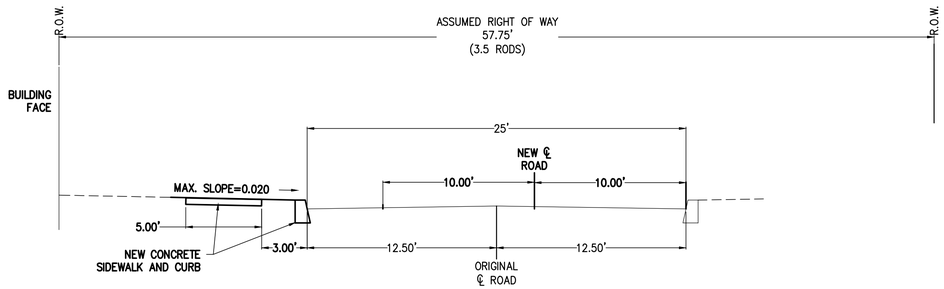
D 3 SUMMIT RIDGE TO SUMMIT STREET
SCALE: 1"=5'



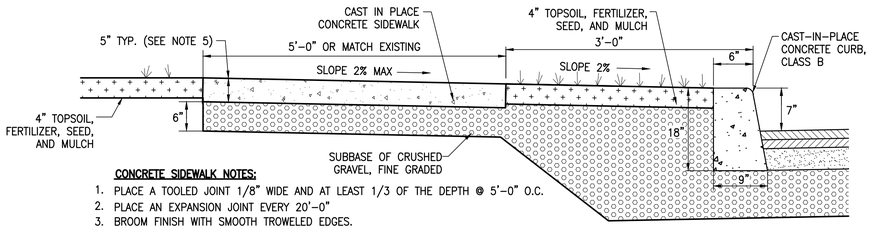
CONCRETE SIDEWALK NOTES:

1. PLACE A TOOLED JOINT 1/8" WIDE AND AT LEAST 1/3 OF THE DEPTH @ 5'–0" O.C.
2. PLACE AN EXPANSION JOINT EVERY 20'–0"
3. BROOM FINISH WITH SMOOTH TROWELED EDGES.
4. SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH VAOT STANDARDS, SECTION 618.
5. CONCRETE SHALL BE THICKENED TO 8" THROUGH ALL RESIDENTIAL DRIVES.
6. GREEN SPACE BETWEEN EDGE OF ROAD AND EDGE OF SIDEWALK SHALL BE 4' UNLESS OTHERWISE INDICATED ON THE CONTRACT DRAWINGS.
7. AFTER INITIAL CURING PERIOD IS OVER (APPROXIMATELY 28 DAYS) ALL EXPOSED SURFACES SHALL RECEIVE TWO COATS OF WATER REPELLANT, SILANE.

E 3 TYPICAL SIDEWALK – SUMMIT RIDGE TO SUMMIT STREET
SCALE: NONE



F 3 SUMMIT STREET TO SOUTH PROSPECT STREET
SCALE: 1"=5'



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G 3 TYPICAL SIDEWALK – SUMMIT STREET TO SOUTH PROSPECT STREET
SCALE: NONE

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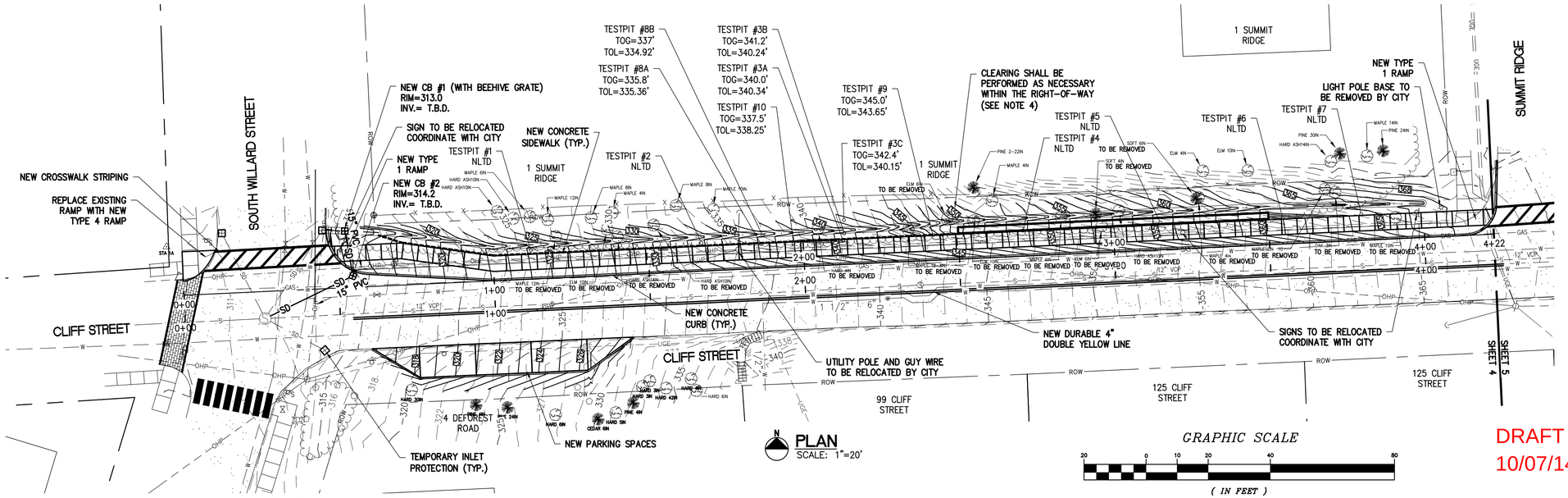
CLIFF STREET SIDEWALK IMPROVEMENTS

TYPICAL STREET/SIDEWALK CROSS SECTIONS

DESIGNED	PROJECT NO.
JJD	12077
DRAWN: JEB	DRAWING NO. 3
CHECKED: JJD	
DATE: OCT. 2014	



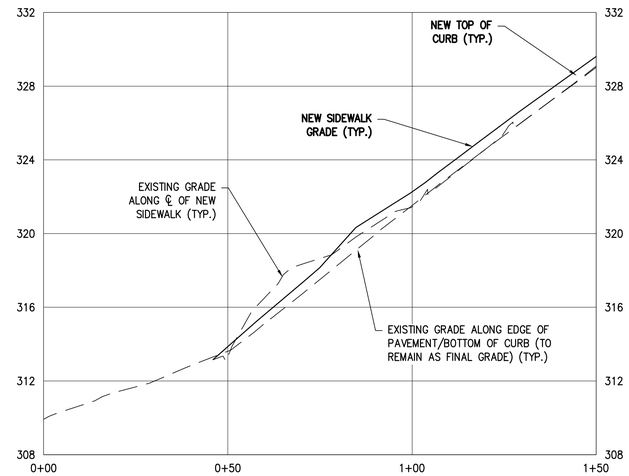
PLAN
SCALE: 1"=20'

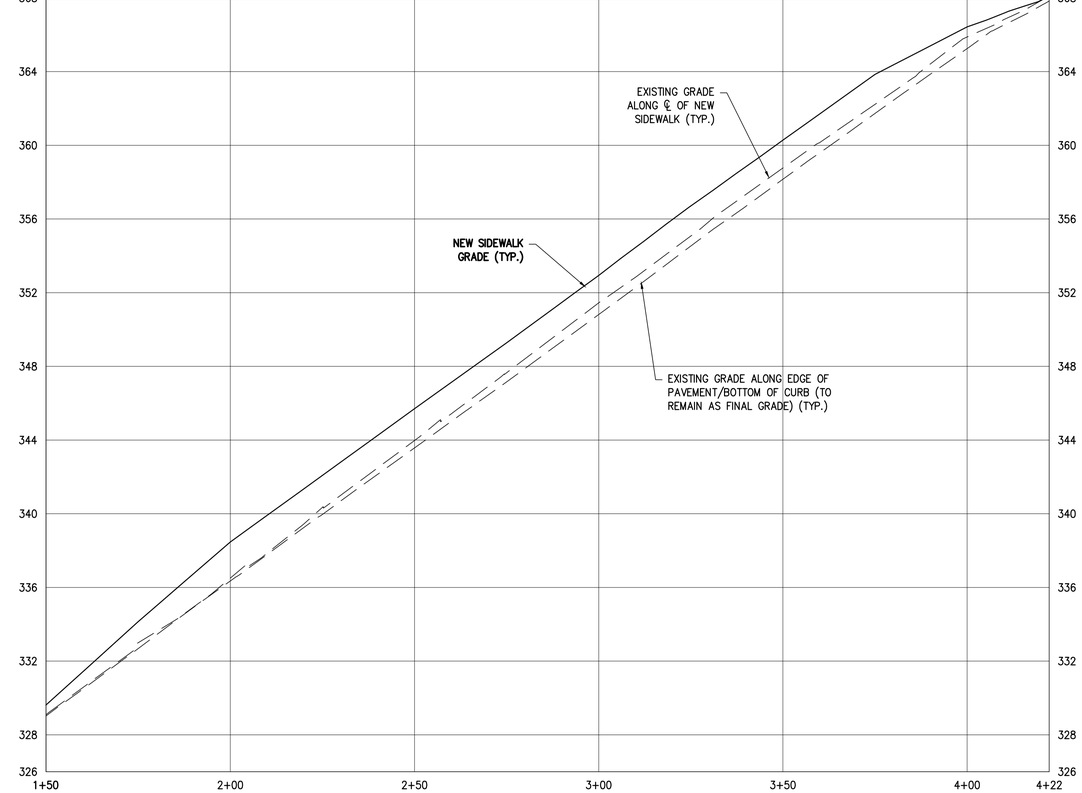
GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

DRAFT
10/07/14

NOTES:

1. TOG= TOP OF GRADE
2. TOL=TOP OF LEDGE
3. NLTD=NO LEDGE TO DEPTH
4. CONTRACTOR SHALL REMOVE TREES AS SHOWN. ALL OTHER TREES SHALL BE PROTECTED DURING CONSTRUCTION.





SIDEWALK PROFILE
SCALE: HORIZ.=1"=20'
VERT.=1"=4'

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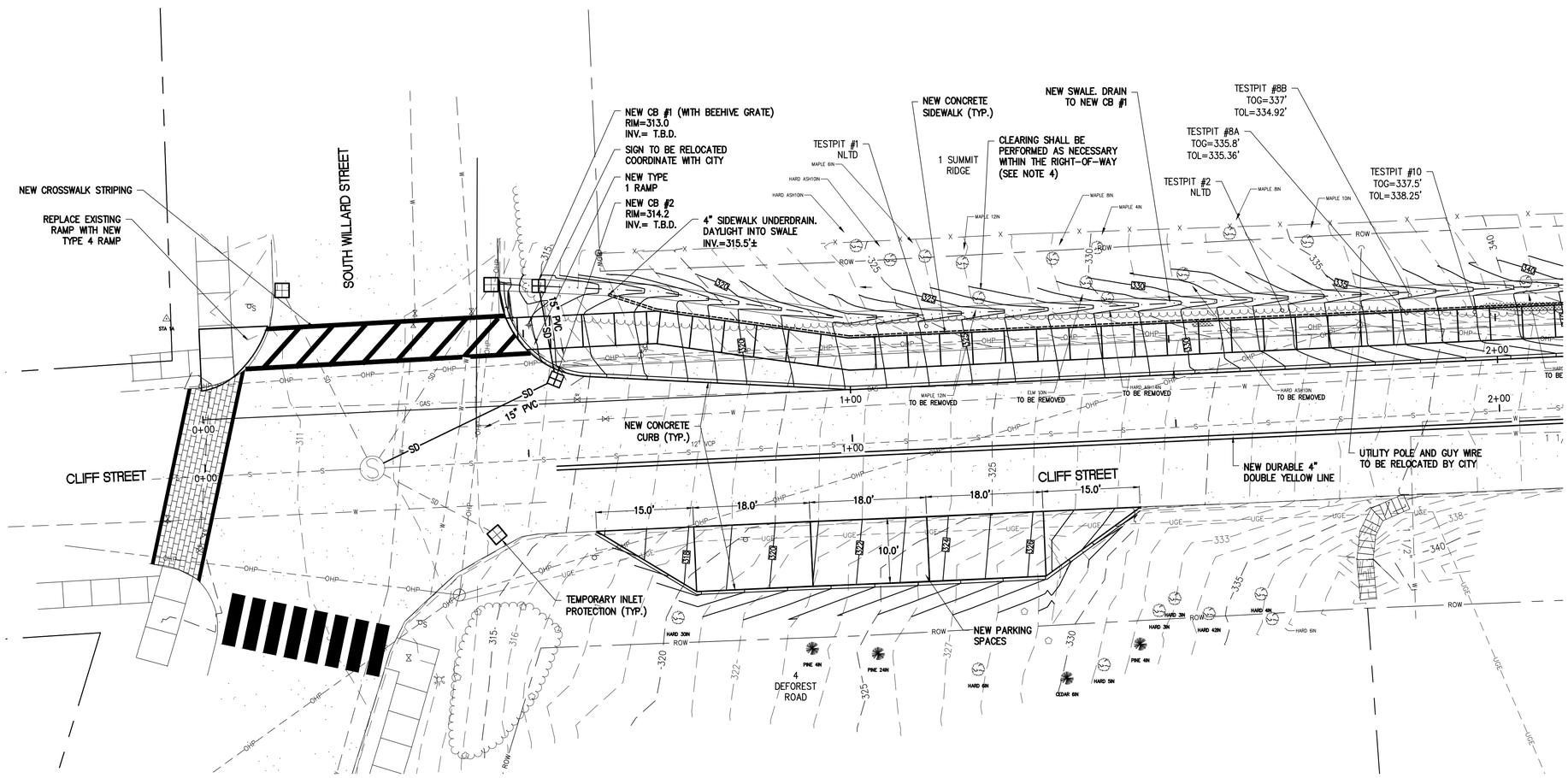
CLIFF STREET SIDEWALK IMPROVEMENTS

PLAN AND PROFILE STATION 0+00 TO 4+22

DESIGNED	PROJECT NO.
JJD	12077
DRAWN: JEB	DRAWING NO. 4
CHECKED: JJD	
DATE: OCT. 2014	



NOTES:

1. TOG= TOP OF GRADE
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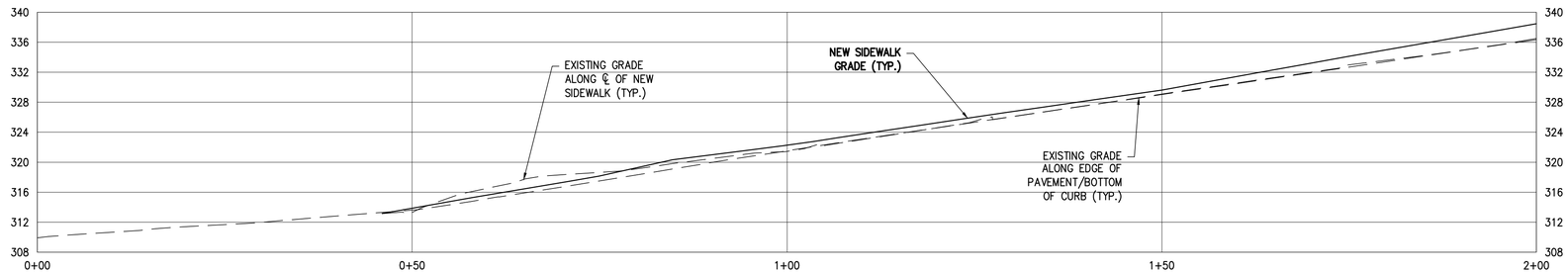
N
PLAN
SCALE: 1"=10'

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)



SIDEWALK PROFILE
SCALE: HORIZ.=1"=10'
VERT.=1"=10'

DRAFT
10/07/14

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Essex Jct., VT 05452
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No.	DATE	DESCRIPTION

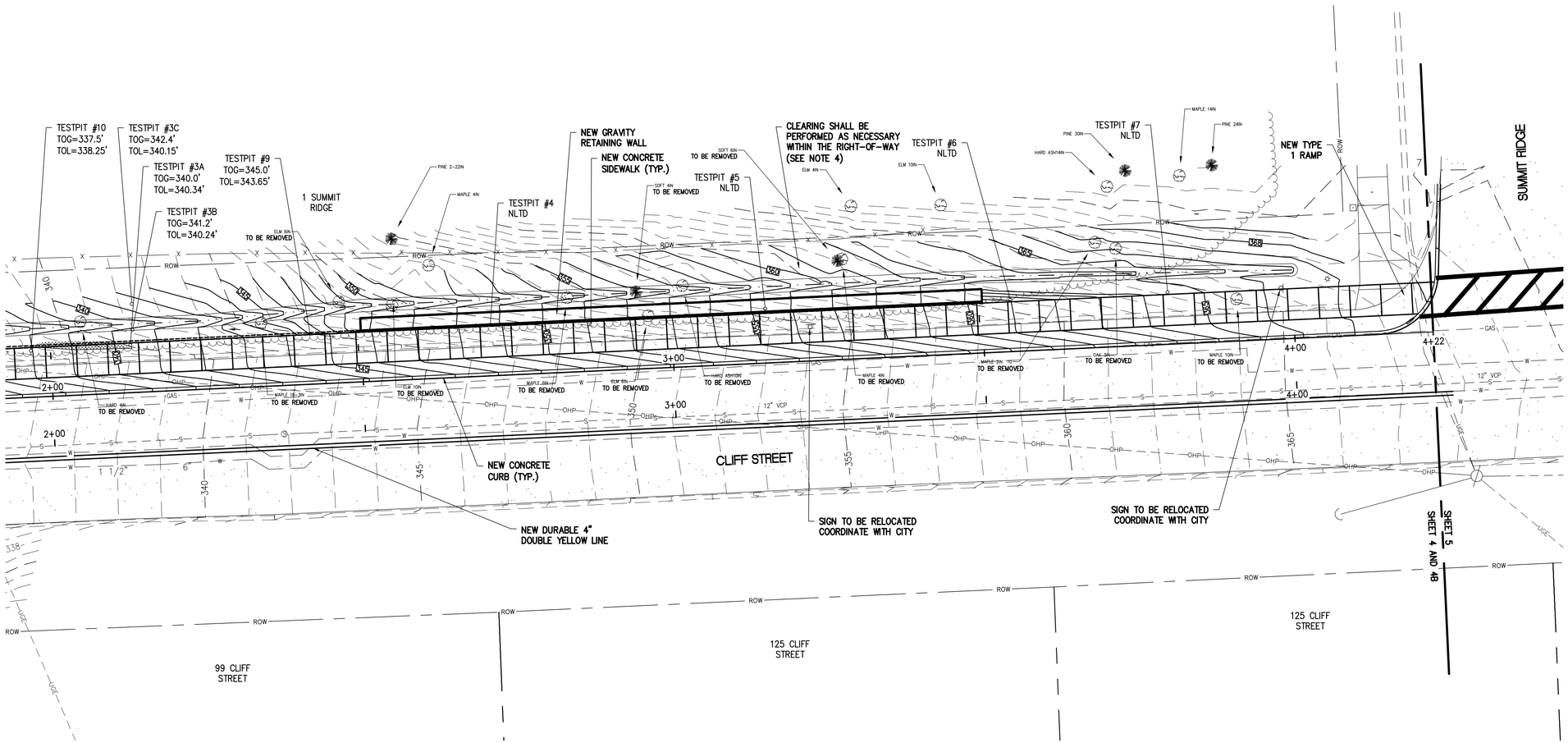
CHECKED

CITY OF BURLINGTON, VERMONT

CLIFF STREET SIDEWALK IMPROVEMENTS

PLAN AND PROFILE STATION 0+00 TO 2+00

DESIGNED JJD	PROJECT NO. 12077
DRAWN JEB	DRAWING NO. 4A
CHECKED JJD	
DATE OCT. 2014	



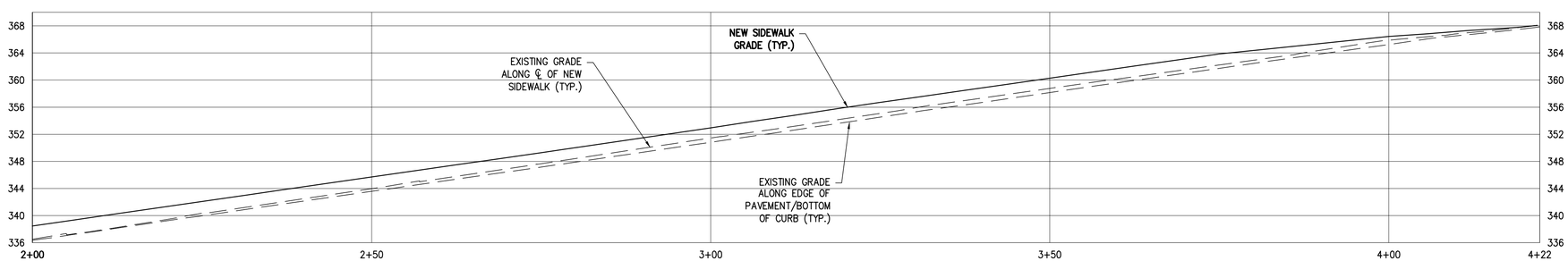
NOTES:

1. TOG= TOP OF GRADE
2. TOL=TOP OF LEDGE
3. NLTD=NO LEDGE TO DEPTH
4. CONTRACTOR SHALL REMOVE TREES AS SHOWN. ALL OTHER TREES SHALL BE PROTECTED DURING CONSTRUCTION.

PLAN
SCALE: 1"=10'

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)

DRAFT
10/07/14



SIDEWALK PROFILE
SCALE: HORIZ.=1"=10'
VERT.=1"=10'

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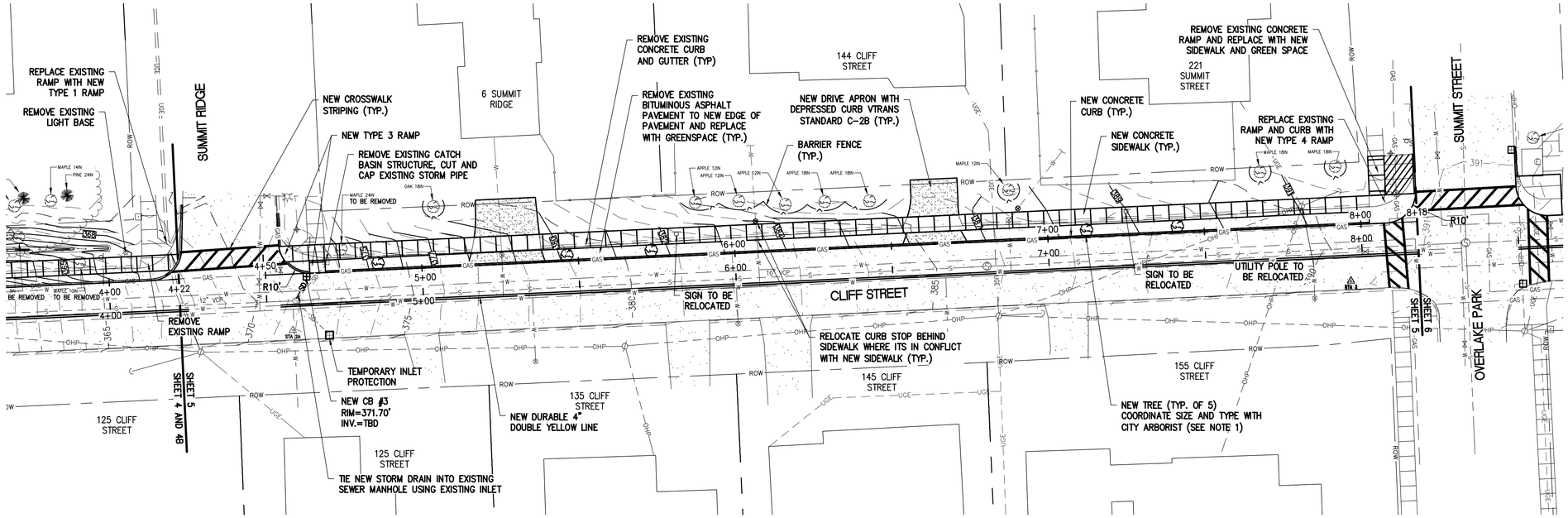
No.	DATE	DESCRIPTION	CHECKED

CITY OF BURLINGTON, VERMONT

CLIFF STREET SIDEWALK IMPROVEMENTS

PLAN AND PROFILE STATION 2+00 TO 4+22

DESIGNED	PROJECT NO.
JJD	12077
DRAWN: JEB	DRAWING NO.
CHECKED: JJD	4B
DATE: OCT. 2014	



PLAN
SCALE: 1"=20'

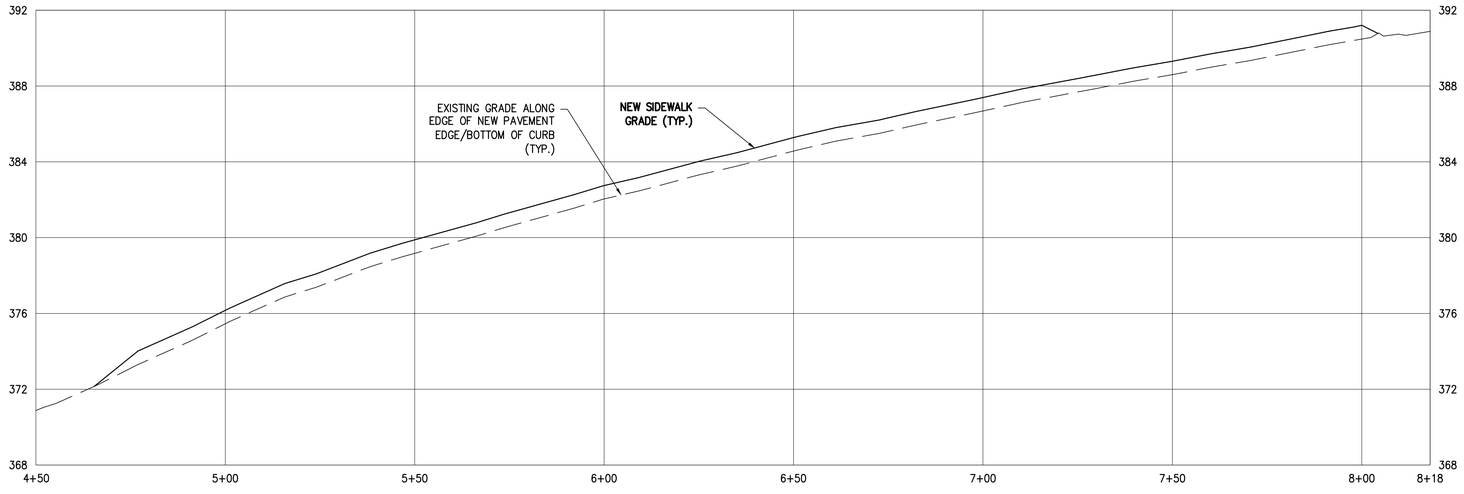
GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

NOTES:

1. CONTRACTOR SHALL EXCAVATE THE GREENBELT BETWEEN THE NEW CURB AND SIDEWALK TO A DEPTH OF 36" BELOW EXISTING GRADE AND REPLACE THE MATERIAL WITH APPROVED SOIL.



SIDEWALK PROFILE
SCALE: HORIZ.=1"=20'
VERT.=1"=4'

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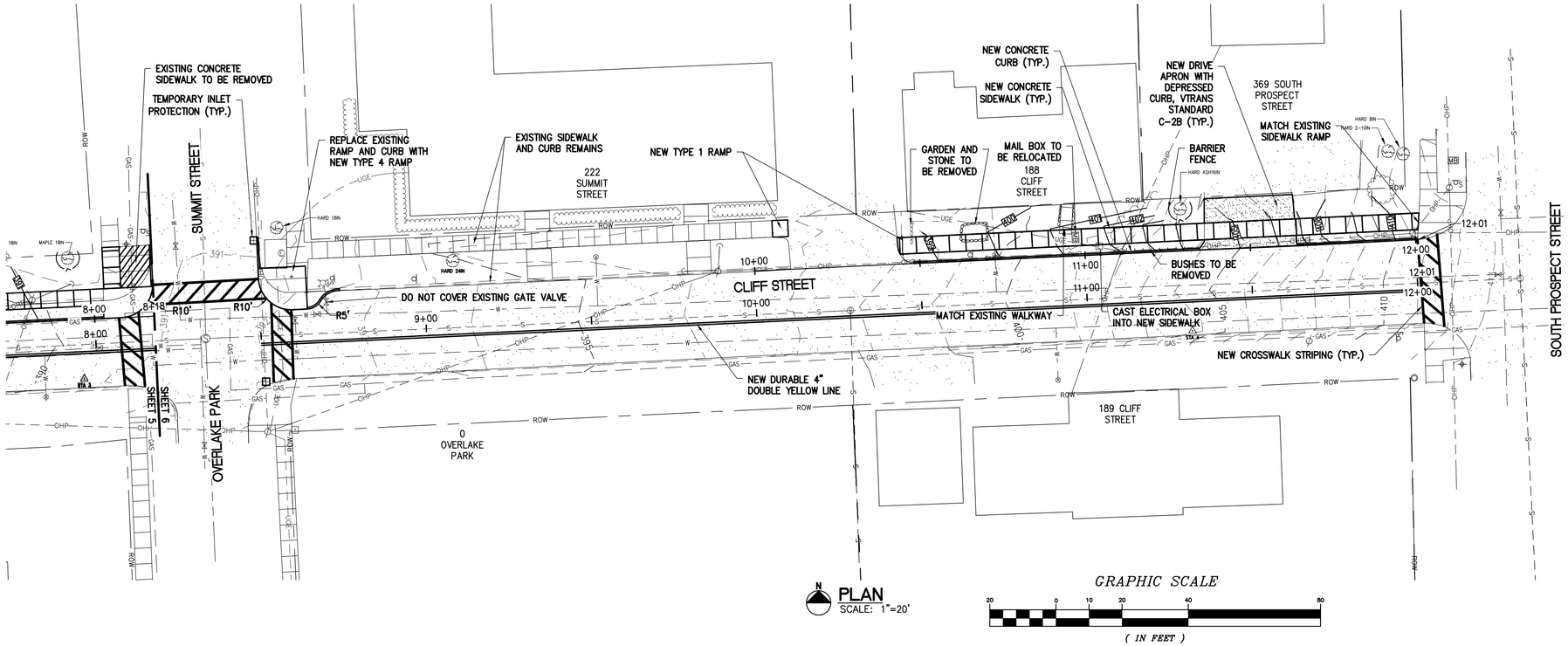
No.	DATE	DESCRIPTION	CHECKED

CITY OF BURLINGTON, VERMONT

CLIFF STREET SIDEWALK IMPROVEMENTS

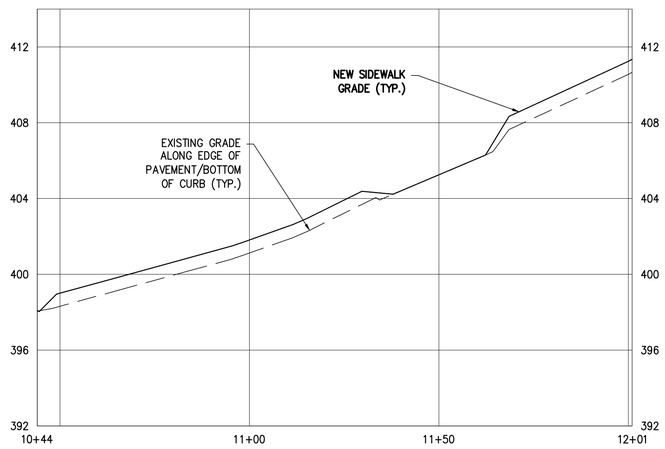
PLAN AND PROFILE STATION 4+22 TO 8+18

DESIGNED	PROJECT NO.
JJD	12077
DRAWN	DRAWING NO.
JEB	5
CHECKED	
JJD	
DATE	
OCT. 2014	



PLAN
SCALE: 1"=20'

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)



SIDEWALK PROFILE
SCALE: HORIZ.=1"=20'
VERT.=1"=4'

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10/07/14

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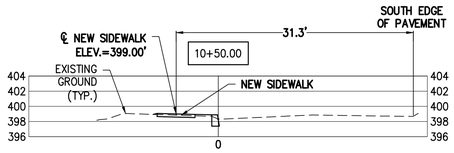
No.	DATE	DESCRIPTION	CHECKED

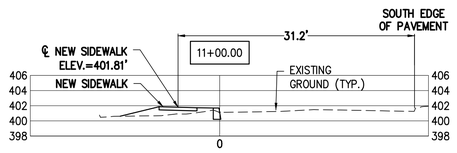
CITY OF BURLINGTON, VERMONT

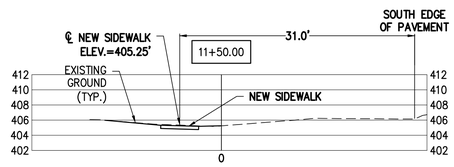
CLIFF STREET SIDEWALK IMPROVEMENTS

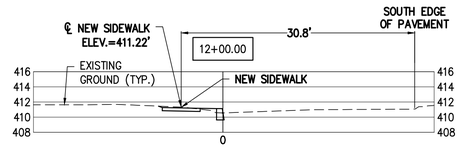
PLAN AND PROFILE STATION 8+18 TO 12+01

DESIGNED	PROJECT NO.
JJD	12077
DRAWN: JEB	DRAWING NO.
CHECKED: JJD	6
DATE: OCT. 2014	



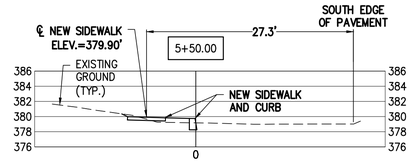


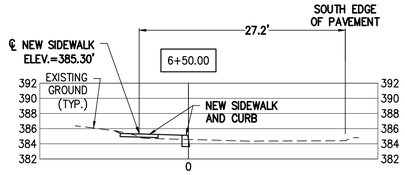


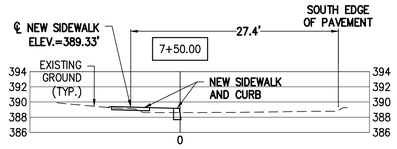


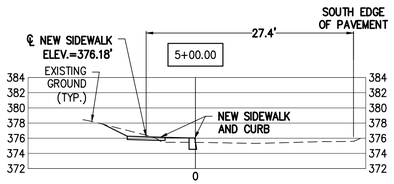
NEW SIDEWALK CROSS SECTIONS - SUMMIT STREET TO SO. PROSPECT ST.

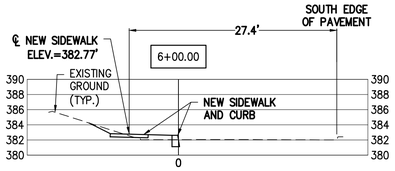
SCALE: 1"=10'

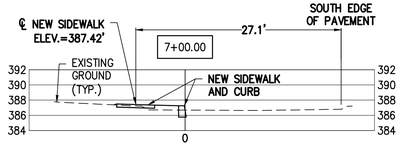


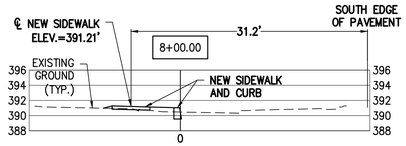






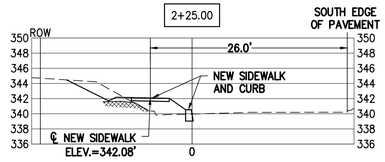


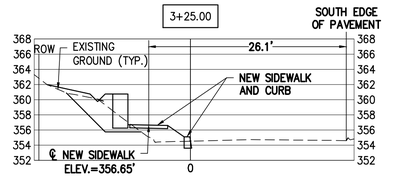


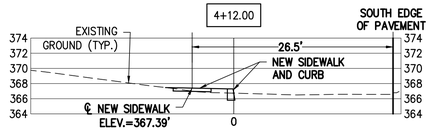


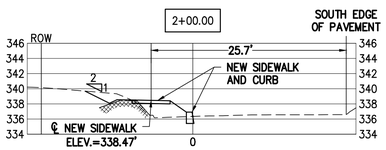
NEW SIDEWALK CROSS SECTIONS - SUMMIT RIDGE TO SUMMIT STREET

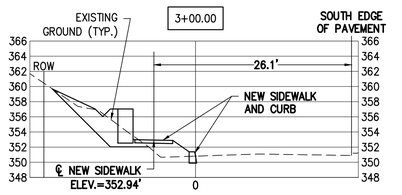
SCALE: 1"=10'

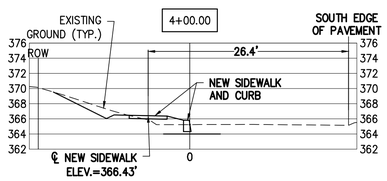


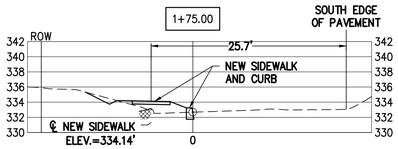


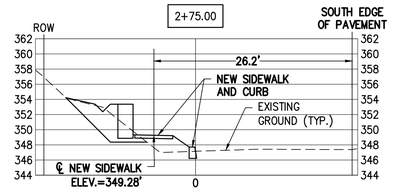


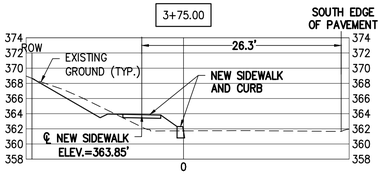


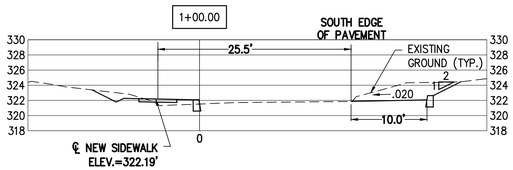


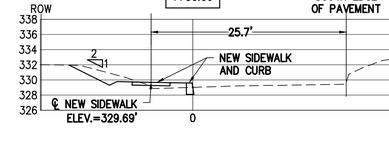


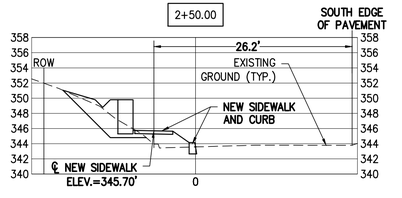


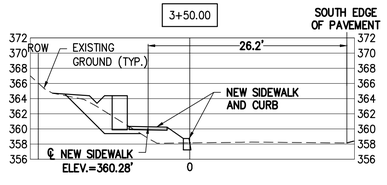


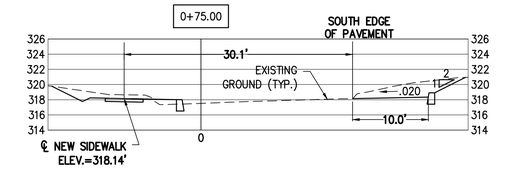


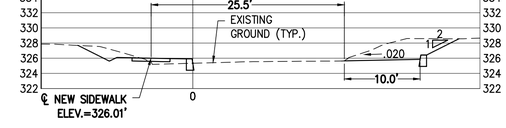


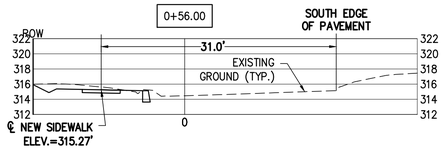












NEW SIDEWALK CROSS SECTIONS - SO. WILLARD TO SUMMIT RIDGE - NO WALL

SCALE: 1"=10'

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)

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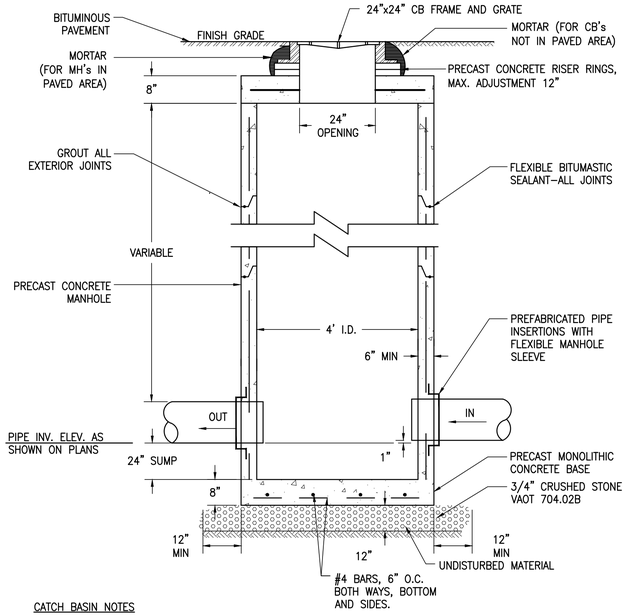
No.	DATE	DESCRIPTION	CHECKED

CITY OF BURLINGTON, VERMONT

CLIFF STREET SIDEWALK IMPROVEMENTS

SIDEWALK CROSS SECTIONS

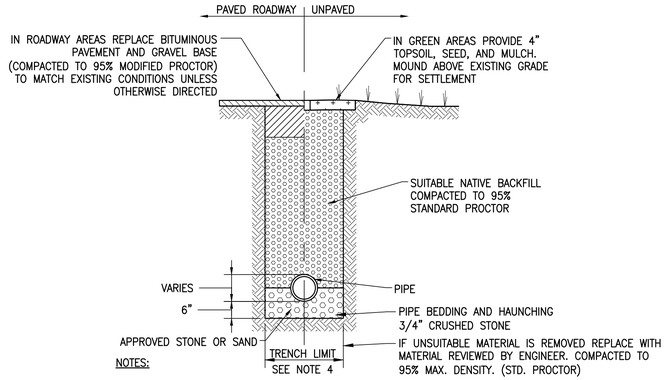
DESIGNED	PROJECT NO.
JJD	12077
DRAWN: JEB	DRAWING NO. 7
CHECKED: JJD	
DATE: OCT. 2014	



CATCH BASIN NOTES

1. IF DEPTH OF CATCH BASIN IS 7 FEET OR LESS FROM RIM TO CENTERLINE INVERT THEN A FLAT TOP WILL BE INSTALLED. IF DEPTH OF MANHOLE FROM RIM TO CENTERLINE INVERT IS MORE THAN 7 FEET THEN A CONICAL TOP WILL BE INSTALLED.
2. PROVIDE FLANGE GRATE AND FRAME.
3. CONCRETE=4,000 psi; STEEL REBAR=40,000 psi
4. STRUCTURES SHALL BE DESIGNED TO WITHSTAND AN H20 LOADING.

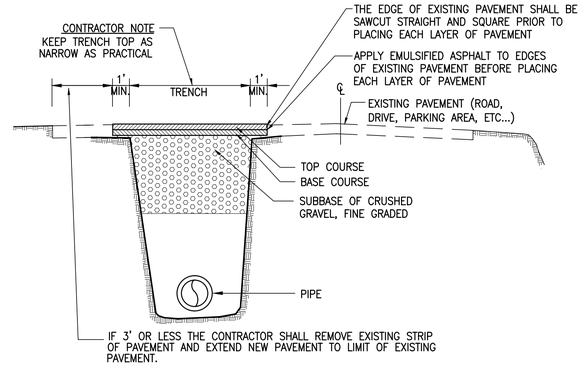
A/8 TYPE II CATCH BASIN DETAIL
SCALE: NONE



NOTES:

1. NO MECHANICAL TAMPERS SHALL BE USED DIRECTLY OVER PVC PIPE TO ENSURE PIPE IS NOT DAMAGED.
2. BEDDING TO PROVIDE A FIRM, STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR THE FULL LENGTH OF THE PIPE.
3. FOR INITIAL BACKFILL CONTRACTOR CAN USE 3/4" CRUSHED STONE.
4. THE TRENCH LIMITS SHALL BE AS FOLLOWS:
   A. 6' FOR PIPES INSTALLED WITH A DEPTH OF COVER 10' OR LESS.
   B. 8' FOR PIPES INSTALLED WITH A DEPTH OF COVER GREATER THAN 10'.

B/8 TYPICAL STORMDRAIN TRENCH DETAIL
SCALE: NONE



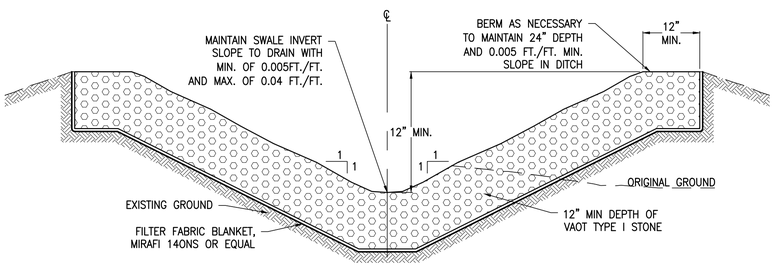
PAVEMENT REPAIR NOTES:

1. ALL PAVEMENT SHALL HAVE A MINIMUM COMPACTED THICKNESS AS SHOWN.
2. SHOULDER SHALL BE REPLACED, IF NECESSARY, TO ITS CONDITION PRIOR TO CONSTRUCTION.
3. PAVEMENT REPAIR WORK WITHIN CITY ROW SHALL MATCH EXISTING CONDITIONS

SCHEDULE OF TRENCH REPAIR THICKNESSES

	STREETS	DRIVEWAYS
BITUMINOUS PAVEMENT		
TOP COURSE	1–1/2" TYPE III	1" TYPE IV
BASE COURSE – TYPE II	2"	1"
FINE CRUSHED GRAVEL	8"	4"
COARSE CRUSHED GRAVEL SUBBASE	12"	8"

C/8 TYPICAL TRENCH PAVEMENT REPAIR DETAIL
SCALE: NONE



D/8 TYPICAL STONE LINED DRAINAGE SWALE DETAIL
SCALE: NONE

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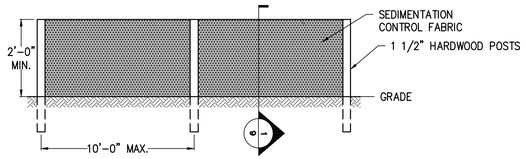
No.	DATE	DESCRIPTION	CHECKED

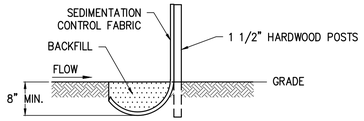
CITY OF BURLINGTON, VERMONT

CLIFF STREET SIDEWALK IMPROVEMENTS

STORMWATER AND ROADWAY DETAILS

DESIGNED JJD	PROJECT NO. 12077
DRAWN JEB	DRAWING NO. 8
CHECKED JJD	
DATE OCT. 2014	

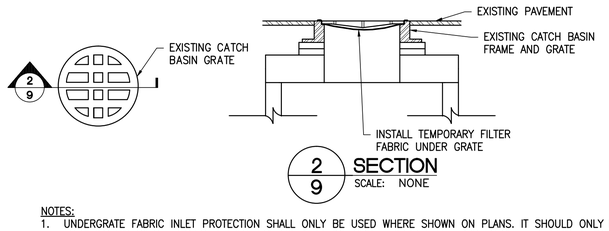




1/9 SECTION
SCALE: NONE

NOTES:
1. SILT FENCE SHALL BE PRE-FABRICATED EROSION CONTROL FENCE.
2. INSTALL WHERE SHOWN ON PLANS. THE FENCE SHALL BE INSTALLED PARALLEL TO CONTOURS WHERE POSSIBLE. THE ENDS OF THE FENCE SHOULD BE CURVED UPHILL TO PREVENT FLOW AROUND THE ENDS.
3. SECTIONS OF THE SILT FENCE SHALL BE JOINED TO OVERLAP BY FOLDING FABRIC AROUND EACH POST ONE FULL TURN. DRIVE POSTS TIGHTLY TOGETHER AND SECURE TOPS OF POSTS BY TYING OFF WITH CORD OR WIRE TO PREVENT FLOW-THROUGH OR BUILT-UP SEDIMENT AT JOINT.
4. INSPECT ALL SILT FENCE AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER EACH RAINFALL. MAINTENANCE SHALL BE PERFORMED AS NEEDED, AND SEDIMENT REMOVED WHEN SEDIMENT REACHES 1/3 HEIGHT OF THE SILT FENCE.
5. UPON FINAL STABILIZATION OF THE AREA UPHILL OF THE FABRIC, THE FABRIC SHALL BE REMOVED WITH THE APPROVAL OF THE ENGINEER.

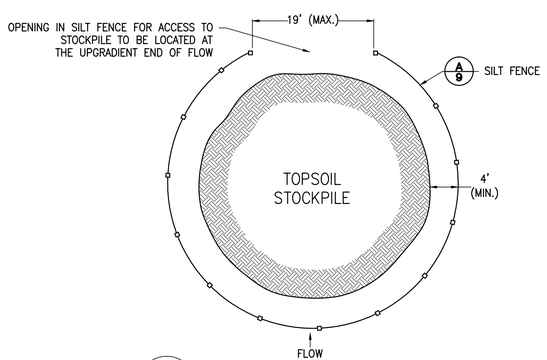
A/9 TYPICAL TEMPORARY SILT FENCE DETAIL
SCALE: NONE



2/9 SECTION
SCALE: NONE

NOTES:
1. UNDERGRATE FABRIC INLET PROTECTION SHALL ONLY BE USED WHERE SHOWN ON PLANS. IT SHOULD ONLY BE USED FOR EXISTING CATCH BASINS IN EXISTING PAVED AREAS FOR LINEAR PIPELINE PROJECTS WHERE AMOUNT OF SEDIMENT RUN OFF IS MINIMAL AND DURATION OF CONSTRUCTION IS SHORT.
2. LIFT THE GRATE AND INSTALL FILTER FABRIC OVER THE FRAME, AND THEN SET GRATE BACK IN PLACE.
3. INSPECT EACH INLET AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER EVERY RAINFALL. REPAIR AND REPLACEMENT OF INLET PROTECTION SHALL BE MADE AT TIME OF INSPECTION.
4. UPON STABILIZATION OF THE AREA UPSTREAM FROM THE INLET, THE PROTECTION SHALL BE REMOVED WITH THE APPROVAL OF THE ENGINEER.

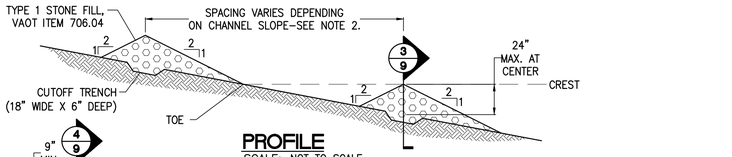
B/9 TYPICAL TEMPORARY INLET PROTECTION DETAIL
SCALE: NONE



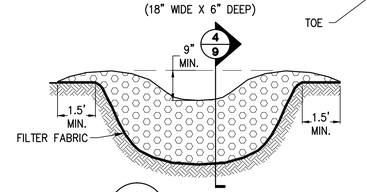
C/9 TYPICAL TOPSOIL STOCKPILE DETAIL
SCALE: NONE

SOUTH WILLARD TO SUMMIT RIDGE EROSION CONTROL NOTES:

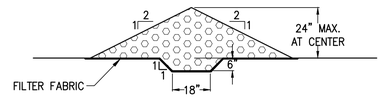
1. CONTRACTOR SHALL DEVELOP AND SUBMIT, FOR APPROVAL, AN EROSION CONTROL PLAN SPECIFICALLY FOR WORK ALONG THE STEEP SLOPES FROM SOUTH WILLARD TO SUMMIT RIDGE.
2. AT A MINIMUM, THE PLAN SHALL INCLUDE THE FOLLOWING:
   A) TEMPORARY INLET PROTECTION SHALL BE INSTALLED ON THE CATCH BASINS LOCATED AT THE SOUTH WILLARD INTERSECTION.
   B) A TEMPORARY SEDIMENT BASIN SHALL BE INSTALLED AT THE BASE OF THE HILL AROUND STATION 0+50 TO CONTAIN SEDIMENT FROM THE RUNOFF BEFORE IT FLOWS INTO THE ROAD AND THE EXISTING CATCH BASIN SYSTEM. THE BASIN SHALL BE SIZED TO ACCOMMODATE THE REMOVAL OF THE ACCUMULATED SEDIMENT UNTIL THE SITE HAS BEEN STABILIZED.
   C) SILT FENCE SHALL BE INSTALLED ALONG THE DOWNSTREAM BERM OF THE TEMPORARY SEDIMENT BASIN.
   D) UPON CLEARING AND GRUBBING, A TEMPORARY DITCH SHALL BE GRADED ALONG THE PROPOSED SIDEWALK ALIGNMENT TO DIRECT FLOW INTO THE TEMPORARY SEDIMENT BASIN.
   E) TEMPORARY STONE CHECK DAMS SHALL BE INSTALLED ALONG THE TEMPORARY SWALE UPSTREAM OF THE TEMPORARY SEDIMENT BASIN TO REDUCE THE VELOCITY OF CONCENTRATED FLOWS.



PROFILE
SCALE: NOT TO SCALE



3/9 SECTION
SCALE: NOT TO SCALE



4/9 SECTION
SCALE: NOT TO SCALE

NOTES:
1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION AT ALL LOCATIONS SHOWN ON THE PLANS.
2. SET SPACING OF THE CHECK DAMS TO ASSURE THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT THE FLOW OF WATER AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT THE CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.
6. INSPECT ALL CHECK DAMS AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER WACH RAINFALL. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN SEDIMENT REACHES 1/3 HEIGHT OF CHECK DAM.
7. UPON STABILIZATION OF THE AREA UPSTREAM OF THE STONE CHECK DAM, THE CHECK DAM SHALL BE REMOVED WITH THE APPROVAL OF THE ENGINEER. THE AREA UNDER THE STONE CHECK DAM SHALL BE SEEDED AND MULCHED UPON REMOVAL.

D/9 TYPICAL TEMPORARY STONE CHECK DAM DETAIL
SCALE: NONE

DRAFT
10/07/14

GENERAL EROSION CONTROL NOTES:

1. THIS PROJECT HAS BEEN PERMITTED AS A LOW RISK SITE. THE CONTRACTOR AT A MINIMUM MUST FOLLOW THE LOW RISK SITE HANDBOOK AT ALL TIMES. THE CONTRACTOR SHALL OBTAIN ANY ADDITIONAL PERMITS IF THE PROJECT IS MODIFIED IN SUCH A WAY THAT CHANGES THE PERMIT JURISDICTION.
2. EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED PRIOR TO PERFORMING ANY EARTHWORK DOWNSTREAM OF THE DISTURBED AREA AND AS DIRECTED BY THE CONSTRUCTION ENGINEER. THE MEASURES SHALL BE MAINTAINED UNTIL THE UPSTREAM DISTURBED AREA HAS BEEN PERMANENTLY STABILIZED AND AS DIRECTED BY THE CONSTRUCTION ENGINEER. THE CONTRACTOR SHALL INSTALL ALL TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL MEASURES DETERMINED NECESSARY IN THE FIELD.
3. SILT FENCE SHALL BE INSTALLED, AS SHOWN ON THE CONTRACT DRAWINGS PRIOR TO ANY EARTHWORK DOWNSTREAM OF THE DISTURBED AREA AND AS DIRECTED BY THE CONSTRUCTION ENGINEER. THE SILT FENCE SHALL BE MAINTAINED AND CLEANED UNTIL THE UPSTREAM DISTURBED AREA HAS BEEN PERMANENTLY STABILIZED AND AS DIRECTED BY THE CONSTRUCTION ENGINEER. WHERE POSSIBLE NATURAL DRAINAGE WAYS SHALL BE UTILIZED AND LEFT OPEN TO REMOVE EXCESS SURFACE WATER.
4. STONE CHECK DAMS SHALL BE INSTALLED IN DRAINAGE SWALES, AS SHOWN ON THE CONTRACT DRAWINGS AND AS DIRECTED BY THE CONSTRUCTION ENGINEER. CHECK DAMS SHALL BE INSTALLED IMMEDIATELY FOLLOWING DISTURBANCE OF THE DRAINAGE SWALE AND SHALL BE MAINTAINED UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED AND AS DIRECTED BY THE CONSTRUCTION ENGINEER.
5. DEGRADABLE EROSION CONTROL BLANKETS SHALL BE INSTALLED ON DISTURBED VEGETATED SLOPES THAT HAVE SLOPES GREATER THAN 4:1. THE CONTRACTOR SHALL INSTALL THE DEGRADABLE EROSION CONTROL BLANKETS PER MANUFACTURER'S RECOMMENDATIONS.
6. PROPER EROSION CONTROLS SHALL BE PROVIDED AROUND STOCKPILED EXCAVATED MATERIALS. THESE CONTROLS MAY INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING METHODS OF EROSION PREVENTION AND SEDIMENT CONTROL: PERIMETER SILT FENCE; INTERCEPTOR DRAINAGE DITCHES; VELOCITY REDUCTION DAMS IN DRAINAGE DITCHES; TEMPORARY BANK PROTECTION SUCH AS RIPRAP, MATTING, OR ARTIFICIAL COVERING; STONE CHECK DAM CONTROL SYSTEMS; SPECIAL STOCKPILING METHODS; AND WATER BARS.
7. THE CONTRACTOR SHALL PROVIDE A MECHANICAL SWEEPER AND SHALL SWEEP CLEAN THE ROADS IN THE CONSTRUCTION AREAS AS REQUIRED TO REMOVE ACCUMULATED SEDIMENT AND PREVENT SEDIMENT RUNOFF INTO RECEIVING WATERS AND AS DIRECTED BY THE CONSTRUCTION ENGINEER.
8. TEMPORARY EROSION CONTROL MEASURES SHALL BE UTILIZED BY THE CONTRACTOR AS REQUIRED TO PREVENT ANY SEDIMENTATION FROM RUNNING INTO RECEIVING WATERS. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MINIMIZE ANY IMPACT OF THE ON-SITE SURFACE RUNOFF ON THE QUALITY OF THE RECEIVING WATERS.
9. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE DISTURBED AT ANY ONE TIME DURING CONSTRUCTION. WHEN LAND IS DISTURBED DURING CONSTRUCTION, THE DISTURBANCE SHALL BE KEPT TO THE SHORTEST PRACTICAL DURATION AS APPROVED BY THE CONSTRUCTION ENGINEER. LAND SHALL NOT BE LEFT DISTURBED DURING THE WINTER MONTHS AND OVERWINTER STABILIZATION MEASURES SHALL BE INSTALLED PRIOR TO OCTOBER 15TH.
10. ALL DISTURBED AREAS AND SIDE SLOPES WHICH ARE FINISH GRADED WITH NO FURTHER CONSTRUCTION TO TAKE PLACE SHALL BE LOAMED, LIMED, FERTILIZED, SEEDED, AND MULCHED WITHIN 48 HOURS OF FINAL GRADING. A MINIMUM OF 4 INCHES OF LOAM SHALL BE PLACED.
11. NO DISTURBED AREAS SHALL BE LEFT UNSEEDED AND UNMULCHED FOR MORE THAN SEVEN (7) DAYS. DISTURBED AREAS WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION. HAY OR STRAW MULCH SHALL BE APPLIED TO ALL FRESHLY SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE. BALES SHALL BE UNSPOILED, AIR DRIED, AND FREE FROM WEED, SEEDS, AND ANY COARSE MATERIAL. CONTRACTOR MAY ALSO USE EROSION MATTING OR OTHER APPROVED METHODS OF TEMPORARY COVER.
12. ALL EROSION PREVENTION AND SEDIMENT CONTROL STRUCTURES AND MEASURES SHALL BE INSPECTED BY OR UNDER THE DIRECTION OF THE ON-SITE COORDINATOR AT LEAST EVERY SEVEN (7) CALENDAR DAYS AND AS SOON AS POSSIBLE BUT NO LATER THAN 24 HOURS AFTER ANY STORM EVENT WHICH GENERATES A DISCHARGE OF STORMWATER RUNOFF FROM THE CONSTRUCTION SITE.
13. AFTER ALL UPSTREAM DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED AND AS DIRECTED BY THE CONSTRUCTION ENGINEER, THE DOWNSTREAM TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED AND THE ACCUMULATED SEDIMENT PROPERLY DISPOSED OF. THE AREA DISTURBED BY THE REMOVAL OF TEMPORARY MEASURES SHALL BE PREPARED, SEEDED, AND MULCHED.

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No.	DATE	DESCRIPTION	CHECKED

CITY OF BURLINGTON, VERMONT

CLIFF STREET SIDEWALK IMPROVEMENTS

EROSION CONTROL DETAILS AND NOTES

DESIGNED JJD	PROJECT NO. 12077
DRAWN JEB	DRAWING NO. 9
CHECKED JJD	
DATE OCT. 2014	